



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,112	09/30/2003	Christoph Hofmann	34874-063 UTIL	4325
64280	7590	02/15/2008	EXAMINER	
MINTZ, LEVIN, COHN, FERRIS, GLOVSKY & POPEO, P.C. 5355 Mira Sorrento Place SUITE 600 SAN DIEGO, CA 92121			LIU, LIN	
		ART UNIT	PAPER NUMBER	
		2145		
		MAIL DATE	DELIVERY MODE	
		02/15/2008	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Interview Summary	Application No.	Applicant(s)	
	10/677,112	HOFMANN ET AL.	
	Examiner	Art Unit	
	LIN LIU	2145	

All participants (applicant, applicant's representative, PTO personnel):

(1) LIN LIU. (3) Joseph Juliano.

(2) _____. (4) _____.
 Date of Interview: 05 February 2008.

Type: a) Telephonic b) Video Conference
 c) Personal [copy given to: 1) applicant 2) applicant's representative]

Exhibit shown or demonstration conducted: d) Yes e) No.
 If Yes, brief description: _____.
 Claim(s) discussed: 1 and 26.

Identification of prior art discussed: Ho (PGPUB: US 2003/0135640 A1), Wookey (PGPUB: US 2003/0177259).

Agreement with respect to the claims f) was reached. g) was not reached. h) N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.



JASON CARDONE
SUPERVISORY PATENT EXAMINER

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Examiner's signature, if required

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: A telephonic interview was conducted with applicant's representatives. Applicant's 112 rejections were discussed and they are overcome with the proposed amendment. Furthermore, 103 rejection was also discussed with respect to the prior arts of record., but the proposed amendment does not overcome the 103 rejection. Applicant's representative agreed with the Examiner to further amend the claims to incorporate the main inventive features from the Specification in order to overcome the 103 rejection..

MINTZ LEVIN

Joseph Juliano | 858-320-3031 | jjuliano@mintz.com

5355 Mira Sorrento Place
Suite 600
San Diego, CA 92121
858-320-3000
858-320-3001 fax
www.mintz.com

COMMUNICATION TO EXAMINER ONLY
TO THE ATTENTION OF:
EXAMINER LIN LIU AT

FROM:

Name Joseph Juliano
Date June 7, 2007
of Pages 9 (including cover sheet)

To:

Name	Company	Business#	Fax #
Lin Liu - Examiner	United States Patent Office		571-270-2447

Agenda for Interview Request

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

PAGE 1/9 * RCVD AT 1/29/2008 7:07:59 PM (Eastern Standard Time) * SVR:USPTO-EFXRF-6/22 * DNI:2702447 * CSID: * DURATION (mm:ss):01:40

Application Serial No.: 10/677,112 Conf. No.: 4325
Applicant : Christoph Hofmann et al.
Filed : September 30, 2003
TC/Art Unit : 2145
Examiner : Liu, Lin
Title : PSEUDO-SYNCHRONOUS MESSAGING

Proposed Agenda

This document is a proposed agenda for a telephone conference that we would like to hold before the next due date of February 6, 2008. We would be available for anytime and would prefer an afternoon slot, if available.

In general, we would like to discuss the rejections under 35 USC section 112 and the prior art rejections under section 103 with reference to claim 1 and the other independent claims.

Regarding the 112 rejections, the undersigned would like to confirm that the amendments in the following set of claims would overcome the rejections. Regarding the 112, written description rejection of claim 1, the undersigned respectfully submits that the rejected portion of claim 1 would have been understood to one of ordinary skill in the art to have been in the possession of the inventors. In particular, OSI (Open Systems Interconnection) is a known standard to describe layers. See e.g.,

http://en.wikipedia.org/wiki/OSI_model;

http://www.sigcomm.org/standards/iso_stds/OSI_MODEL/index.html (OSI is documented in ISO 7498). In the OSI model, layer 3 of that model includes the network layer. Combined with that, the present application states, in part: "message transmissions between applications in a heterogeneous system landscape," which refers to application-level messaging. ¶ 3 of the present application. To satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor(s) had possession of the claimed invention. MPEP § 2163. In view of the above, the undersigned submits that it would be well understood to one skilled in the art that by referring to application to application messages, that the inventors were in possession of having messaging "at a communication layer higher than an Open Systems

Interconnection Basic Reference Model layer 3," which is above the network layer of that model.

Regarding the prior art rejections, it is respectfully submitted that the interpretation of the cited references in view of the claim language does not properly cover the claimed subject matter such that the alleged combination does not exist and would not be obvious. For example, in claim the following "the asynchronous request message for enterprise application-level processing of the asynchronous request message at a receiver system, the request message ...being at a communication layer higher than an Open Systems Interconnection Basic Reference Model layer 3" is not the same as the disclosure of Ho for at least the reason that the request message of Ho is not at the communication layer higher than an OSI layer 3; thus, the combination of Ho with the other references would not result in the alleged combination. As another example, the official action's rejection of claim 1 recites, in part:

"As the consequence of combining the Wookey's invention with the combined method of Ho's and Wilhelmsson's method, that the XML request message is generated and processed from the Application layer, which is higher than the OSI model layer 3, thus the XML request message data needs to be processed from the Application layer down to the Physical Layer so that the actual data communication between the sender and receiver systems can be taken place in the Physical Layer as disclosed in the combined method of Ho's and Wilhelmsson's invention."

However, the combination is not accurate at least because claim 1 recites "the asynchronous request message for enterprise application-level processing of the asynchronous request message at a receiver system, the request message ...being at a communication layer higher than an Open Systems Interconnection Basic Reference Model layer 3" which is not disclosed in Ho. For example, assuming to the alleged combination of references were obvious, even if the alleged physical-layer-level request message of Ho represents a portion of an XML message, the request message of Ho is not the request message of independent claims that is at a communication layer higher than an OSI model layer 3 (claim 1) or is an enterprise application-level request message (claim 12), and the XML message of Wookey is not a request message, such that the

alleged combination of references is not an alleged combination that reads on the claims and makes the claimed subject matter obvious. Should further amendment be necessary to alleviate the discrepancies in interpretation, claim 1 includes suggested amendments. Claim 3 also includes suggested amendments to further differentiate the claimed subject matter from the cited references and attention to claim 3 is appreciated.

In view of these discrepancies in interpretation, discussion of the claim language and clarification of how the alleged features are interpreted to be the same as the claim language would further prosecution and is respectfully requested.

With best regards,

/Joseph Juliano/

Joseph Juliano

Reg. No. 54,780

Draft, Amended Claims

Listing of Claims:

1. (Currently Amended) A computer-implemented communication method for application-level messaging, the method comprising:

providing one or more requests for acknowledgement in a asynchronous request message transmitted from an application-level of a sender system and to be acknowledged by an exchange infrastructure component, wherein each request for acknowledgement corresponds to at least one event related to the request message, the asynchronous request message for enterprise application-level processing of the asynchronous request message at a receiver system, the request message being in a format in accordance with extensible markup language format and being at a communication layer higher than an Open Systems Interconnection Basic Reference Model layer 3; and

transmitting the request message with the one or more requests for

acknowledgement to the receiver system, the receiver system being an enterprise system providing services, the request to request one or more of the services of the receiver system to process the asynchronous request message, and the transmitting the request message comprising transmitting the request message in an exchange infrastructure for communication among components of collaborative business systems, the components comprising the sender system and the receiving system.

2. (Original) The method in accordance with claim 1, wherein requesting an acknowledgement includes setting a flag in a header of the request message.

3. (Currently Amended) The method in accordance with claim 2, wherein the flag is set as a property in a Simple Object Access Protocol-compliant header of the asynchronous request message.

4. (Original) The method in accordance with claim 1, wherein the event includes a system error during transport of the request message to the receiver system.

5. (Original) The method in accordance with claim 1, wherein the event includes the receipt of the request message by the receiver system.

6. (Original) The method in accordance with claim 1, wherein the event includes the successful processing of the request message by an application associated with the receiver system.

7. (Original) The method in accordance with claim 1, wherein the event includes the erroneous processing of the request message by an application associated with the receiver system.

8. (Original) The method in accordance with claim 1, further comprising generating the acknowledgement message upon completion of the event.

9. (Original) The method in accordance with claim 8, further comprising transmitting the acknowledgement message to the sender system.

10. (Original) The method in accordance with claim 1, further comprising:

generating a hoplist that includes a list of network components through which the request message is transmitted; and

transmitting an acknowledgement message related to each request for acknowledgement through network components corresponding to the hoplist.

11. (Original) The method in accordance with claim 1, further comprising:

splitting, at one or more network components between the sender system and the receiver system, a request message that is transmitted to one or more receiver systems into two or child messages, wherein each child message includes the one or more requests for acknowledgement; and

receiving an acknowledgement message related to event associated with each child message.

12. (Currently Amended) A computer-implemented communication method for acknowledging one or more events related to an asynchronous request message sent from a sender system to a receiver system, the method comprising:

receiving an asynchronous request message from the sender system, the asynchronous request message ~~for being an enterprise application-level request message~~ enterprise application-level processing of the asynchronous request message at the receiver system;

determining, based on the asynchronous request message, whether an acknowledgement to an event associated with the asynchronous request message is requested; and

if an acknowledgement to the event associated with the asynchronous request message is requested, transmitting an asynchronous acknowledgement message to the sender system upon occurrence of the event, wherein the asynchronous acknowledgement message includes a result of the event and a reference to the asynchronous request message.

13. (Original) The method in accordance with claim 12, wherein the event corresponds to one or more events selected from the event group that consists of:

the receipt of the asynchronous request message by the receiver system;

a system error during transport of the request message to the receiver system; the successful processing of the request message; and/or the erroneous processing of the request message.

14. (Original) The method in accordance with claim 12, wherein the asynchronous acknowledgement message is generated by the receiver system, and further comprising receiving the asynchronous acknowledgement message from the receiver system.

15. (Original) The method in accordance with claim 14, further comprising matching the asynchronous acknowledgement message with the associated asynchronous request message.

16. (Original) The method in accordance with claim 15, wherein matching the asynchronous acknowledgement message with the associated asynchronous request message includes comparing the reference to the asynchronous request message with a message ID of a copy of the asynchronous request message.

17. (Original) The method in accordance with claim 12, wherein determining whether the sender system requests an acknowledgement to an event associated with the asynchronous request message includes reading a flag in a header of the asynchronous request message.

18. (Original) The method in accordance with claim 17, wherein the flag is set by the sender system.

19. (Currently Amended) A system for asynchronous communication between a sender system and a receiver system, comprising:

a forward pipeline for transmitting asynchronous request messages from the sender system to the receiver system, the asynchronous request messages being enterprise application-level messages for enterprise application-level processing of the asynchronous request messages at the receiver system; and

a backward pipeline for transmitting asynchronous acknowledgement messages from the receiver system to the sender system, wherein each acknowledgement message includes a reference to a request message and a result of an event associated with the request message.

20. (Original) The system in accordance with claim 19, further comprising an enterprise application integrator hosted on a server, and wherein the forward pipeline includes a first HTTP connection from the sender system to the server and a second HTTP connection from the server to the receiver system.

21. (Original) The system in accordance with claim 19, wherein the backward pipeline includes a first HTTP connection from the receiver system to the server and a second HTTP connection from the server to the sender system.

22. (Original) The system in accordance with claim 19, further comprising a database associated with the forward and backward pipelines, for storing a copy of each transmitted request message and each transmitted acknowledgement message.

23. (Previously Presented) The method in accordance with claim 1, wherein the asynchronous request message comprises a plurality of requests comprising a first request for acknowledgement of a state of processing of the asynchronous request message at a software application of the receiver system and each of the requests is to result in a separate acknowledgment message.

24. (Previously Presented) The method in accordance with claim 23, wherein the first request is a request for acknowledgement of whether the software application failed to process the message.

25. (Previously Presented) The method in accordance with claim 1, wherein the components are web-based applications.

26. (Currently Amended) The method in accordance with claim 1, wherein the transmitting of the asynchronous request message is initiated by an outbound proxy call to an exchange engine to transmit the message to an exchange infrastructure server, ~~the asynchronous request message and the exchange infrastructure stores duplicates of the asynchronous request message for reexecution in case of error, and an application of the sender system that causes the call of the outbound proxy continues processing information other than the asynchronous request message without an acknowledgment from the receiver system or of status of the call.~~